

AD _____

MIPR NO: 95MM5666

TITLE: Support of the Center for Prostate Disease Research at
the Walter Reed Army Institute of Research

PRINCIPAL INVESTIGATOR(S): Judd Moul, M.D., LTC

CONTRACTING ORGANIZATION: Uniformed Services University
Health Sciences
Bethesda, Maryland 20814-4799

REPORT DATE: January 1996

19960205 056

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Frederick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release; distribution
unlimited

The views, opinions and/or findings contained in this report are those
of the author(s) and should not be construed as an official Department
of the Army position, policy or decision unless so designated by other
documentation.

DTIC QUALITY INSPECTED 1

REPORT DOCUMENTATION PAGE			Form Approved OMB No. 0704-0188	
Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.				
1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE January 1996		3. REPORT TYPE AND DATES COVERED Annual (25 Aug 95 - 30 Sep 95)
4. TITLE AND SUBTITLE Support of the Center for Prostate Disease Research at the Walter Reed Army Institute of Research			5. FUNDING NUMBERS 95MM5666	
6. AUTHOR(S) Judd Moul, M.D., LTC				
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Uniformed Services University Health Sciences Bethesda, Maryland 20814-4799			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Medical Research and Materiel Command Fort Detrick Frederick, Maryland 21702-5012			10. SPONSORING/MONITORING AGENCY REPORT NUMBER	
11. SUPPLEMENTARY NOTES This report also covers research for 93MM3555 and 92MM2560				
12a. DISTRIBUTION / AVAILABILITY STATEMENT Approved for public release; distribution unlimited			12b. DISTRIBUTION CODE	
<p>13. ABSTRACT (Maximum 200 words) This progress report covers the third year of existence of the Center for Prostate Disease Research (CPDR), a collaborative research program of the Uniformed Services University of the Health Sciences (USUHS), the Walter Reed Army Medical Center (WRAMC) and Institute of Research (WRAIR), and the Armed Forces Institute of Pathology (AFIP). The Center is involved in the study of the molecular biology of prostate disease through laboratory activities at USUHS and the clinical study of prostate patients and pathology of the prostate at WRAMC and AFIP. The main goal of CPDR is to <u>integrate</u> both basic and clinical study of prostate cancer to bring basic science advances to the clinical benefit of prostate cancer patients.</p> <p>During this report, period the CPDR has made a number of important scientific advancements related to clinical and basic science studies of prostate cancer. The clinical database of DoD prostate cancer patients has grown to over 2,500 cases and has been used for important studies. Most notably, we have discovered that African American prostate cancer patients have higher prostate specific antigen (PSA) levels due primarily to larger primary tumor size. This work was published this year in a feature article in <u>The Journal of the American Medical Association</u>. The database continues to expand and will provide outstanding ongoing clinical research opportunities. The basic science laboratory program has also excelled. The p53 tumor suppressor gene activation has been characterized in prostate cancer, been found to be an important prognostic marker in early stage disease treated by surgery, and formed the basis for exciting pre-clinical studies of p53-adenovirus gene therapy. Other gene alterations including bcl-2, p16, and androgen receptor have been studied in prostate cancer and many ongoing molecular investigations are in progress.</p> <p>Overall, the CPDR is becoming recognized as a world-class prostate cancer research program and is providing positive recognition for WRAIR, USUHS, WRAMC, AFIP, and the USAMRMC.</p>				
14. SUBJECT TERMS PROSTATE CANCER, BENIGN PROSTATIC HYPERPLASIA, ETIOLOGY, ONCOGENES, TUMOR SUPPRESSOR GENES, TREATMENT, OUTCOMES			15. NUMBER OF PAGES 29	
			16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited	

GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to *stay within the lines* to meet optical scanning requirements.

Block 1. Agency Use Only (Leave blank).

Block 2. Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

Block 3. Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

Block 4. Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

Block 5. Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

C - Contract	PR - Project
G - Grant	TA - Task
PE - Program Element	WU - Work Unit Accession No.

Block 6. Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

Block 7. Performing Organization Name(s) and Address(es). Self-explanatory.

Block 8. Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

Block 9. Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

Block 10. Sponsoring/Monitoring Agency Report Number. (If known)

Block 11. Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

Block 12a. Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

DOD - See DoDD 5230.24, "Distribution Statements on Technical Documents."

DOE - See authorities.

NASA - See Handbook NHB 2200.2.

NTIS - Leave blank.

Block 12b. Distribution Code.

DOD - Leave blank.

DOE - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.

NASA - Leave blank.

NTIS - Leave blank.

Block 13. Abstract. Include a brief (*Maximum 200 words*) factual summary of the most significant information contained in the report.

Block 14. Subject Terms. Keywords or phrases identifying major subjects in the report.

Block 15. Number of Pages. Enter the total number of pages.

Block 16. Price Code. Enter appropriate price code (*NTIS only*).

Blocks 17. - 19. Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

Block 20. Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.

FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the US Army.

JWM Where copyrighted material is quoted, permission has been obtained to use such material.

JWM Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.

JWM Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.

JWM In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).

JWM For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

JWM In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.

JWM In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

JWM In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

 20 DEC 95
PI - Signature Date

TABLE OF CONTENTS

**TITLE: Support of the Center for Prostate Disease Research at the Walter Reed
 Army Institute of Research**

1. Front Cover
2. SF 298
3. Foreword
4. Table of Contents
- 5-6. Introduction/Summary Statement
7. Body
 - (a) Personnel
- 7-14. Body
 - (b) Programs/Projects
15. Conclusions
- 16-17. References
 - Publications during reporting period
18. References
 - Published abstracts during reporting period
- 19-29. Appendix - data collections forms: Registration, staging, radical prostatectomy, radiation therapy, hormonal therapy, cryotherapy, TRUS, follow-up, radiation follow-up, necropsy, pathology.

I. INTRODUCTION/SUMMARY STATEMENT

This progress report covers the third year of existence of the Center for Prostate Disease Research (CPDR), a collaborative research program of the Uniformed Services University of the Health Sciences (USUHS), the Walter Reed Army Medical Center (WRAMC) and Institute of Research (WRAIR), and the Armed Forces Institute of Pathology (AFIP). The Center is involved in the study of the molecular biology of prostate disease through laboratory activities at USUHS and the clinical study of prostate patients and pathology of the prostate at WRAMC and AFIP. The main goal of CPDR is to integrate both basic and clinical study of prostate cancer to bring basic science advances to the clinical benefit of prostate cancer patients.

The CPDR laboratory is housed in rooms A-3009 & A-3018 and contains approximately 1,500 sq. ft. of space within the Department of Surgery at USUHS and is a fully-equipped molecular biology laboratory. Five full-time researchers and several part-time

research students are utilizing this facility. The CPDR laboratory is also being utilized for training of Urology residents from Walter Reed in the field of molecular biology of prostate cancer. A formal memorandum of understanding for the National Naval Medical Center, Bethesda, MD, to participate in these efforts has been completed. CPDR clinical activities are based at the Urology Service, Department of Surgery at WRAMC. Three 150 sq. ft. offices houses five full-time employees and a number of part-time researchers. A comprehensive clinical database of all prostate cancer patients treated at WRAMC is underway which is integrated with pathologic and molecular studies.

II BODY

a) Personnel

NAME	FUNDING SOURCE	START DATE	STOP DATE	FT/PT	JOB DESCRIPTION
Judd W. Moul, LTC, MC	Military	09/14/92	NA	FT	Director, CPDR
David G. McLeod, COL, MC	Military	09/14/92	NA	FT	Chief of Urology, WRAMC
Norman M. Rich, MD	USUHS	09/14/92	NA	PT	USUHS Senior Consultant
Sherry S. Osborne	USUHS	09/14/92	NA	PT	USUHS Administrator
Donald Sturtz, MD	USUHS	09/15/94	NA	PT	USUHS Consultant
F.K. Mostofi, MD	AFIP	09/14/92	NA	PT	Pathologist
Isabell A. Sesterhenn, MD	AFIP	09/14/92	NA	PT	Pathologist
Shiv K. Srivastava, PhD	HJF	05/01/93	NA	FT	Director, CPDR Laboratory
Jaya Gaddipati, PhD	HJF	10/01/93	NA	FT	Molecular Biologist
Dorothy Tong	HJF	05/01/94	8/1/95	FT	Molecular Biologist
Juli Harris, BA	HJF	10/01/93	9/4/95	FT	Clinical DBase Coordinator
Rene Mooneyhan, BA	HJF	06/20/94	NA	FT	Clinical DBase Researcher
Shirley L. Craig	HJF	05/09/94	NA	FT	Administrative Assistant
Denise Young	HJF	01/15/94	NA	PT	Pathology Technician
Roger Connelly, MS	HJF	09/19/94	NA	PT	Biostatistician
Kekule Asgari	HJF	10/01/94	NA	FT	Research Physician
Carolyn Craig	HJF	12/05/94	NA	FT	Research Technician
Li Wu	HJF	08/16/95	NA	FT	Research Technician
Axel Heidenreich	German Gov't	08/01/95	NA	FT	Research Physician
Bridgit Heidenreich	Volunteer	11/01/95	NA	PT	Research Physician
Angela Pinto	HJF	10/14/95	NA	FT	Clinical Database Researcher
Howard Heidenberg, MAJ, MC	Military	07/01/93	NA	PT	Urology Research Resident
Michael Finger, MAJ, MC	Military	07/01/93	NA	PT	Urology Research Resident
Thomas Douglas, CPT, MC	Military	07/01/94	NA	PT	Urology Research Resident
John Bauer, MAJ, MC	Military	07/01/94	NA	PT	Urology Research Resident
Marie Bettencourt, CPT, MC	Military	07/01/95	NA	PT	Urology Research Resident
Ted Morgan, CPT, MC	Military	07/01/95	NA	PT	Urology Research Resident
Robert Wheelock, PhD	HJF	09/01/95	NA	FT	Molecular Biologist

b) Programs/Projects

1. Prostate Cancer Clinical Database

A major CPDR initiative continues to be the collection of demographic, medical, pathologic, and outcomes data on all prostate cancer patients treated at WRAMC and to expand this collection to other DoD health care facilities. The project has a retrospective component (collecting data on all patients treated at WRAMC since 1980), and a prospective component focusing on complete data collection of all patients seen since 1 January 1994. This project has been approved by the

Department of Clinical Investigation (DCI) at WRAMC and copies of current data collection forms are attached as Addendum

1. The forms have been used both for patient care progress notes and for CPDR data collection. Hard copy research files have been established for over 2500 patients and are housed in the CPDR office at WRAMC. Data entry with quality assurance and security precautions are utilized to enter data into a relational database with database support assistance from WRAMC. WRAMC is the alpha-site for this clinical data collection and the system will be exported to other DoD facilities for similar data collection. During this reporting period Madigan Army Medical Center (Site coordinator: Brantley Thrasher, MAJ, MC, USA); Wilford Hall USAF Medical Center (Site coordinator: Paul Friedrichs, MAJ, MC, USAF) and National Naval Medical Center (Harold Frazier, CDR, MC, USN) had the CPDR Database protocol approved by their respective Institutional Review Boards and began collecting standardized data on PC patients. In addition, Brooke AMC, Malcolm Grow USAF Medical Center, Dewitt ACH, Kimbrough ACH and San Diego Naval Hospital have all agreed to join the project. Madigan AMC has been chosen as the Beta-site and will be the first center to link up to CPDR via the Internet. During this third year of operation, CPDR has seen the database initiative show benefit. Sufficient numbers of patients have been entered into the database such that research reports can be generated and are meaningful. For example, we have analyzed all PC patients treated at WRAMC between 1990-1994 with emphasis on PC in African American men. An important research study examining prostate-specific antigen (PSA) and tumor volume in black males was published in an October 1995 issue of the prominent Journal of the American Medical Association. As more patients from multiple sites

are entered, this research database will be a valuable national resource.

2. Prospective Prostate Cancer Tissue Collection Project

In collaboration with the AFIP, all radical prostatectomies performed for prostate cancer at WRAMC are processed for CPDR research per a WRAMC DCI-approved protocol. AFIP pathology personnel come into the operating room and immediately collect fresh prostate cancer tissue and snap-freeze it for future molecular study. A strict protocol is followed for whole-mounting of the specimens for pathologic research studies. Multicentricity and volume of the tumor are determined, and tissue sections are processed for various immunohistochemical studies. As of the end of this report period, over 150 prospective specimens have been collected and cataloged. These tissues serve as the basis for CPDR laboratory studies at USUHS. Recently CPDR began collecting a portion of prostate tumor from each case for short-term cell culture and gene-therapy studies. These valuable tissues have already led to important discovery. We have been able to find racial disparity in prostate cancer volume in black and white men undergoing radical prostatectomy. Even in the equal-access US Military health-care system, African American men had larger tumors and more adverse pathologic features. Investigation is ongoing.

3. CPDR Molecular Biology Laboratory

The ongoing initiative at USUHS is involved in the study of oncogenes, tumor suppressor genes, and other molecular markers and factors in prostate cancer and benign prostate diseases. The following is a listing of ongoing projects:

a. **Alterations of cell cycle check-point (ccc) genes in prostate cancer.**

Cell cycle check-point control appears to provide control points within the cell cycle

and that appears to play a key role in maintaining the integrity of the cellular genome. Since mutational events represent one of the key molecular defects in the genesis of human cancer, our group has been studying the possible molecular defects of some ccc genes: p53, p16 and WAF/Cip1 in prostate cancer.

a-1. P53 tumor suppressor gene - a survey of tumor suppressor gene p53 mutations in various stages of prostate cancer utilizing immunohistochemistry and gene sequencing has been completed and has been published during the reporting period (Heidenberg, et al. - see below). Our studies have shown the involvement of p53 gene alterations in a high fraction of hormone refractory prostate cancer. More importantly, we have shown that the measurement of alterations of p53 in the primary tumor is a useful prognostic marker to predict recurrences after radical prostatectomy (Bauer, et al. - see below). This work with p53 has been expanded by also examining for bcl-2 oncogene expression to determine if the combination of biomarkers are of prognostic value. In a very important study of 175 men, p53 and bcl-2 were both of prognostic value to predict cancer recurrence after surgery (Bauer, et al. - see below).

a-2. p16 Gene

The p16 (MTS1) gene product is a negative regulator of the cell cycle and has been shown to be deleted or mutated in a number of tumor cell lines and primary tumors. There has been no comprehensive study of p16 gene alterations in prostate cancer. To determine the status of the p16 gene in human prostate cancer, metastatic prostate cancer cell lines and microdissected

primary tumor specimens and adjacent normal tissues from prostate cancer patients were analyzed. Although a point mutation in p16 coding sequence was detected in a metastatic prostate cancer cell line, we did not find mutations of the p16 protein coding sequence in primary prostate cancer specimens (see below Gaddipati et al.). The absence of mutation in p16 protein coding sequence in prostate cancer specimens and a low frequency of p16 mutation in metastatic cell lines suggest that such p16 alterations do not play a major role in the genesis of primary prostate cancer. However, using a new microsatellite marker, microdeletions of p16 gene locus are reported in about 50% prostate cancer and such studies are ongoing using in situ analysis for p16 gene in both primary and metastatic cancer specimens.

b. Elucidation of molecular mechanisms involved in hormone refractory prostate cancer.

Androgen Receptor (AR) mutations in prostate cancer - earlier work by CPDR had suggested a mutational hot spot in the AR gene may be common in advanced prostate cancer. Later work, however, failed to show AR mutations in a larger cohort of over one hundred samples. These later findings will be the basis of a research publication during the fourth reporting period. Since AR mediated signal transduction plays a critical role in prostate cell proliferation and differentiation, we initiated a project evaluating alternative mechanisms of activation of the AR signalling pathway. The ongoing experiments will characterize the role of interactions of tyrosine kinase growth factor receptor and the androgen receptor.

c. **Development of gene therapy strategies based on the molecular genetic alterations in prostate cancer.**

p53 gene therapy of prostate cancer:

In collaboration with Dr. Prem Seth (Medicine Branch NIH), we have developed adenovirus vectors containing the tumor suppressor gene p53. We have obtained very exciting results in demonstrating that adenovirus p53 vectors have dramatic inhibitory effects on the growth of metastatic prostate cancer cell lines via induction of cellular p53 pathways (Srivastava, et al see below.) Further studies in the nude mouse animal model of prostate cancer have shown significant growth inhibitory effects (60-80%) in the progression of established tumors. Further studies of antitumorigenic effects of the adenovirus p53 vector in immune competent animals are currently in progress.

Additional studies are also in progress to follow up these observations in animal models and to design strategies for clinical trials. For this research, the CPDR has received a Research Award from the Association for the Cure of Cancer of the Prostate (CaP Cure) which was used to support ongoing studies during this reporting period.

d. **Development of primary cell culture from prostate tumor specimens:** We have established protocols for growing normal and prostate tumor derived cultures of epithelial cells. This work is extremely important for studies which require a pure population of tumor cells. This study also has utility for future testing of antitumor agents as there are very few prostate cancer cell lines available. We have also recently shown the cell growth inhibitory effects of the adenovirus p53 vector on primary

prostate cell cultures of four patients who underwent radical prostatectomy.

3. Development of DNA/RNA bank from prostate cancer specimens.

As an ongoing function of the CPDR molecular biology laboratory, we have now prepared DNA specimens of carefully microdissected tumor and normal tissue sections from over fifty patients who had undergone radical prostatectomy at Walter Reed Army Medical Center. These specimens represent a long term resource for molecular characterization of prostate cancer. Additionally, we have prepared DNA and RNA from blood from over 90 patients which will be used as a source of constitutional or germ line DNA for determining genetic risk factors specifically in the African American population.

4. Research projects involving collaborations with outside researchers/institutions.

- a. RT-PCR of PSA gene to assess occult micrometastasis in prostate cancer. A VA research grant with the University of Washington, Seattle, and the Seattle VA Hospital was approved for \$65,000 for two years and work started during this reporting period. A total of 85 peripheral blood samples and 40 bone marrow samples have been collected for this project during the reporting period. Analysis and clinical correlation of results are in progress.
- b. Neural Network artificial intelligence computer programs to assess prostate cancer using clinical variables from the CPDR database. Collaboration with Kaman Sciences Corporation is ongoing to predict outcomes of CaP patients based on pre-treatment clinical and pathologic variables. The current model uses 38 input clinical and pathologic variables to predict cancer recurrence after radical prostatectomy. In a

study group of approximately 220 patients, the model was able to correctly predict recurrence with approximately 90% accuracy. This model is currently being validated in a prospective manner.

- c. Cathepsin-D and EGFR expression in prostate cancer as prognostic markers.
Collaboration with Medical College of Virginia and University of North Carolina.
(One publication [see Maygarden, et al.], and a final report-second publication in press in the Journal of Urology [see Moul, et al.]).
- d. IGFII Receptor alterations in prostate cancer.
Collaboration with Duke University Medical Center (ongoing).
- e. TGF β Receptor mutation and microsatellite instability in prostate cancer.
Collaboration with National Cancer Institute, NIH Bethesda (ongoing).
- f. Prostate specific membrane antigen (PSMA) marker studies collaboration with Dr. Gerald Murphy, Pacific Northwest Cancer Institute, Seattle, WA. Ongoing research to determine the value of this serum marker in prostate cancer patients (see Douglas, et al.).
- g. Free PSA studies collaboration with Dr. Gerald Murphy (see above). Studies of prostate cancer patients to determine the value of measuring the free, unbound PSA in the serum versus the bound and total PSA concentrations.
- h. Clinical trials with Eastern Cooperative Oncology Group (ECOG) at WRAMC.

CONCLUSIONS

The Center for Prostate Disease Research (CPDR) program project has made significant progress in the third year of operations. Our mission to advance knowledge of prostate cancer and disease and to integrate clinical and basic science projects is continuing and expanding. The main advances during this reporting period have been the growth, maturity, and output of the CPDR clinical database, the studies of the p53 gene and other genetic alterations in prostate cancer, development of gene therapy experiments, and the general growth solidification of our program as a national resource for the study for prostate disease.

A. REFERENCES CPDR publications during reporting period :

1. Maygarden, SJ, Novotny, DB, Moul, JW, Bae, VL, and Ware, JL: Evaluation of cathepsin D and epidermal growth factor receptor in prostate carcinoma. *Mod Path* 7:930-936, 1994.
2. Heidenberg HB, Sesterhenn I, Gaddipati J, Weghorst C, Buzard G, Moul J, Srivastava S: Alteration of the tumor suppressor gene p53 in a high fraction of treatment resistant prostate cancer. *J Urol*, 154:414-421, 1995.
3. McLeod, DG and Moul, JW: Controversies in the treatment of prostate cancer with maximal androgen deprivation. In: PJ Walther (Ed.), *Controversies and Advances in Urologic Oncology Surgical Oncology, Surgical Oncology Clinics of North America*, WB Saunders, Philadelphia, Vol 4, No 2, 1995, pp 345-359.
4. Moul, JW: Oncogenes and tumor suppressor genes in prostate cancer. In: TA Stamey (Ed), 1995 *Monographs in Urology*, Medical Directions Pub Co, Montverde, FL, 1995.
5. McLeod, DG, O'Brien, ME: Hormonal management of metastatic prostate cancer and quality of life issues. In: NI Vogelzang, PT Scardion, WU Shipley, DS Coffey (Eds) *Comprehensive Textbook of Genitourinary Oncology*, Williams and Wilkins, Baltimore, MD 1195, pp 854-874.
6. Zhau, HE, Zhao, L, Chung, LWK, Chen, B, Troncoso, P, Kao, C, Kojima, M, Symmans, F, Zheng, N, Palmer, JL, Moul, JW, Davis, R, Ye, M, Xiao, L, Hall, MC: Comparative Studies of prostate cancers among US, Chinese, and Japanese patients: characterization of histopathology, tumor antigenesis, neuroendocrine factors and p53 protein accumulations. *Urologic Oncology*, 1:51-63, 1995.
7. Bauer, JJ, Sesterhenn, IA, Mostofi, FK, McLeod, DG, Srivastava, S, Moul, JW: p53 nuclear protein expression is an independent prognostic marker in clinically localized prostate cancer patients undergoing radical prostatectomy. *ClinCancer Res*, 1:1295-1300, 1995.
8. Moul, JW, Sesterhenn, IA, Connelly, RR, Douglas, T, Srivastava, S, Mostofi, FK, McLeod, GD: Prostate-specific antigen values at the time of prostate cancer diagnosis in African-American men. *J Am Med Assoc*, 274:1277-1281, 1995.
9. Moul, JW, Srivastava, S, McLeod, DG: Molecular implications of the antiandrogen withdrawal syndrome. In: EA Klein (Ed), *Seminars in Urology*, WE Saunders, Philadelphia, Vol 13, No 2, May 1995, pp 157-163.
10. Moul, JW, MayGarden, SJ, Ware, JL, Mohler, JL, Maher, PD, Schenkman, NS, Ho, CK: Cathepsin-D and Epidermal Growth Factor Receptor EGFR. *Immunohistochemistry*

- does not predict recurrence of prostate cancer patients undergoing radical prostatectomy. J Urol, (in press).
11. Moul, JW, Douglas, TH, McCarthy, WF, McLeod, DG: Black race is an adverse prognostic factor for prostate cancer recurrence following radical prostatectomy in an equal-access health care system. J Urol (In press).
 12. Srivastava, S, Katayose, D, Tong, YA, Craig, CR, McLeod, DG, Moul, JW, Cowan, K, and Seth, P: Recombinant adenovirus vector expressing wild type p53 is a potent inhibitor of prostate cancer cell proliferation. Urology (in press).
 13. Glajchen, M, and Moul, JW: Teleconferencing as a method of educating men about managing advanced prostate cancer and pain. J Psychosocial Oncol, (in press).
 14. Bauer, JJ, Sesterhenn, IA, Mostofi, FK, McLeod, DG, Srivastava, S, and Moul, JW: Elevated levels of apoptosis regulator proteins p53 and bcl-2 are independent prognostic biomarkers in surgically treated clinically localized prostate cancer patients. J Urol, (submitted).
 15. Moul, JW: Neoadjuvant hormonal therapy in clinically localized prostate cancer. In: SN Rous (Ed), 1996 Urology Annual, Norton, New York, 1996 (in press).
 16. Gaddipati, JP, McLeod, DG, Sesterhenn, IA, Hussussian, CJ, Tong, YA, Seth, P, Dracopoli, NC, Moul, JW, and Srivastava, S: Mutation of the p16 gene product is rare in prostate cancer, The Prostate, (in press).
 17. Katayose, D, Gudan, J, Nguyen, H, Srivastava, S, Cowan, KH, and Seth, P: Cytotoxic effects of adenovirus-mediated wild type p53 protein expression in normal and tumor mammary epithelial cells. Clin Cancer Res, 1:889-893, 1995.

B. PUBLISHED ABSTRACTS CPDR during reporting period:

1. Moul, JW, Connelly, RR, Harris, JA, Mooneyhan, RE, Srivastava, SK, and McLeod, DG: Prostate specific antigen (PSA) values at initial prostate cancer diagnosis are higher in African-American men: Multivariable analysis of 541 patients. *Proc Am Assoc Ca Res*, 36:644, 1995 (abstract No 3836)
2. Douglas, TH, Sesterhenn, IA, Moul, JW, McLeod, DG: The significance of PSA-detected nonpalpable adenocarcinoma of the prostate (Stage T1c). *J Urol*, 153:251A, 1995 (abstract No 92).
3. Moul, JW, Connelly, RR, Harris, JA, Mooneyhan, RE, Srivastava, SK, McLeod, DG: Prostate specific antigen (PSA) values at initial prostate cancer diagnosis are higher in African-American men: multivariable analysis of 541 patients. *J Urol*, 153:417A, 1995 (abstract No 756).
4. Srivastava, S, Katayose, D, Tong, YA, McLeod, DG, Moul, JW, Cowan, K, Seth, P: Adenovirus wild type p53 mediated growth inhibition of prostate cancer cells. *J Urol*, 153:471A, 1995 (abstract No 971).
5. Zhau, HE, Zhao, L, Chung, LWK, Shao, G, Troncoso, P, Kogima, M, Zehng, N, Moul, JW, et al: Comparative studies of prostate cancers among US, Chinese and Japanese patients: Characterization of histopathology, tumor angiogenesis and neuroendocrine factors. *J Urol*, 153:504A, 1995 (abstract No 1103).
6. Moul, JW, Douglas, TH, Sesterhenn, IA, and McLeod, DG: Black men with clinically localized prostate cancer have greater tumor volume stage-for-stage than white men: Effect on prostate-specific Antigen (PSA). *South Med J*, 88:5135, 1995.

REGISTRATION

Patient Rank: Officer Enlisted	Marital Status: Single Married Divorced Widowed Unk	Height: _____ ft. _____ in.
Ethnic Origin: African-American Caucasian Asian Hispanic Other: _____		Weight: _____ lbs.

PATIENT MEDICAL HISTORY:

Family History of CAP? No Yes Unk # of 1st degree affected: _____ (Father, Brother, Son) # of 2nd degree affected: _____ (Grandfather, Uncle, Cousin) Alcohol Use: Current Past Never Unk Cigs: Current Past Never Unk Pipe: Current Past Never Unk Cigars: Current Past Never Unk	Pre-tx Potency: No Yes Unk Treated BPH: No Yes Unk Treatment of BPH (Check all that apply): <input type="checkbox"/> Alpha Block <input type="checkbox"/> 5 Alpha Reductase <input type="checkbox"/> Surgery <input type="checkbox"/> Other: _____ Vasectomy: <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unk Age: <input type="checkbox"/> < 30 <input type="checkbox"/> 30-34 <input type="checkbox"/> 35-40 <input type="checkbox"/> > 40	COPD: No Yes Unk CAD: No Yes Unk HTN: No Yes Unk CVA: No Yes Unk Renal Insuf.: No Yes Unk Diabetes: No Yes Unk Other Cancer: No Yes Unk Specify: _____
--	--	---

GU SYMPTOMS: Yes No
Prostatism: No Yes Unk
Prostatitis: No Yes Unk
SX of Metastases: No Yes Unk
Hematospermia: No Yes Unk
Gross Hematuria: No Yes Unk

REASON FOR BIOPSY:
ABN DRE: No Yes Unk
Elev. PSA: No Yes Unk
PSA Velocity: No Yes Unk
Other: No Yes Unk Specify: _____

PRE-BIOPSY PSA: _____ M _____ D _____ Y _____

BIOPSY RESULTS:

Diagnosis Date: D _____ M _____ Y _____
Number of Biopsies: _____ Number of Pos Biopsies: _____
Previous Biopsy: No Yes No.: _____
Previous Trus: No Yes No.: _____
Biopsy Performed at: WRAMC Other: _____
Location of Pos Biopsy (Worst grade, worst gleason sum): Specific Location (if known):
LEFT SIDE: Neg Pos Not Done L. Apex L. Mid L. Base L. SV
Grade: W M P Gleason Sum: _____ R. Apex R. Mid R. Base R. SV
RIGHT SIDE: Neg Pos Not Done
Grade: W M P Gleason Sum: _____
UNKNOWN SIDE: Neg Pos Not Appl.
Grade: W M P Gleason Sum: _____
BIOPSY TYPE (Circle):
1 TRUS-Findings: Neg Pos Unk
2 Vol: _____ cc's
3 Digitally-Directed Transrectal
4 TURP
5 Other/Specify: _____

SOAP NOTE:

Patient Name: _____ SSN: _____ Date of Birth: D _____ M _____ Y _____
Current Address: _____
Home Phone: _____ Work Phone: _____
Date: _____ Physician's Signature: _____ Revised 12/95

STAGING

PRETREATMENT LAB VALUES (Check all that apply or enter value if known):

Creatinine: _____ D _____ M _____ Y _____ Alk Phosphatase: _____ D _____ M _____ Y _____
 Testosterone: _____ D _____ M _____ Y _____ Pre-Tx PSA: _____ D _____ M _____ Y _____
 Pre-Tx PAP: _____ D _____ M _____ Y _____

RADIOLOGY:

Bone Scan:	Neg	Pos	ND	Pending
MRI-Pelvis:	Neg	Pos	ND	Pending
MRI-Transrectal:	Neg	Pos	ND	Pending
CT Scan ABD:	Neg	Pos	ND	Pending
CT Scan Pelvis:	Neg	Pos	ND	Pending
CXR:	Neg	Pos	ND	Pending
IVP:	Neg	Pos	ND	Pending
CYSTO:	Neg	Pos	ND	Pending

**FINAL CLINICAL STAGE
(PRE-TREATMENT):**

A1	C1
A2	C2
B0	C3
B1	D0
B2	D1
	D2

**FINAL TNM STAGE
(PRE-TREATMENT):**

T1a	T3a	NX	MX
T1b	T3b	N0	M0
T1c	T3c	N1	M1
T2a	T4a	N2	
T2b	T4b	N3	
T2c			

PRIMARY TREATMENT:

Prostatectomy	Hormonal	Radiation	Watch Wait	Cryo	Decision	Pdg
---------------	----------	-----------	------------	------	----------	-----

SOAP NOTE:

Patient's Name: _____ Last Four: _____ Physician's Signature: _____

Patient's Name: _____ Last Four: _____ Physician: _____.

RADICAL PROSTATECTOMY PELVIC LYMPHADENECTOMY

Date of Surgery: Day _____ Month _____ Year _____.

Lymphadenectomy Only: No Yes

Operation Time: Hours _____ Minutes _____.
(Prostatectomy)

Lymphadenectomy: Open Laparoscopic Not Done

Type: Retropubic Perineal Not Done-Aborted

Nerve Sparing: Unilateral Bilateral Not Done Unk

HCT: Pre-Op _____ Day _____ Month _____ Year _____.

Post-Op (first value on post op day 1) _____.

Autologous Blood Collected: No Yes Unk

of Units _____.

Estimated Blood Loss (during surgery): _____ cc's

Transfusion Units (intraoperative): AUTO _____ Non AUTO _____.

Was Preoperative Hormone Manipulation Used? No Yes Unk

Type (Circle): Flutamide Proscar

Lupron Zoladex

Other: _____.

Duration (weeks): _____.

Comments:

WRAMC

PROSTATE RADIATION TREATMENT SUMMARY

Last Name: _____ First Name: _____ MI: _____ SSN: _____

Date of Birth: D _____ M _____ Y _____ Diagnosis: Prostate Cancer Histology: Adenocarcinoma

Gleason Sum: _____ Stage: T _____ N _____ M _____

Tx prior to radiation therapy:

☐ From Biopsy

☐ Prostatectomy

☐ From Surgery

Pre-treatment Lab Values: PSA _____

PAP _____

☐ Hormonal Therapy

TREATMENT:

Start Date: D _____ M _____ Y _____

Elapsed Days _____

of Fractions: _____

Completion Date: D _____ M _____ Y _____

(include start and stop date)

Fraction Size: _____ cGy

Field Arrangement:

☐ 4 Field

☐ Arc

☐ Other Specify: _____

Prescribed Dose:

Pelvis: _____ cGy

Field:

Size:

Prostate + SV: _____ cGy

Prostate: _____ cGy

Energy:

☐ ≤10 MV

☐ >10 MV

☐ Mixed

TREATMENT RESPONSE:

Rectal SX:

☐ Diarrhea

☐ Other

☐ Proctitis

Management:

G-U SX:

☐ Frequency

☐ Dysuria

☐ Hematuria

☐ Other

Management:

Skin SX:

☐ No

☐ Yes

Management:

Breaks in Treatment:

☐ No

☐ Yes

Describe:

Px to RTC in _____ weeks.

Physician Signature: _____

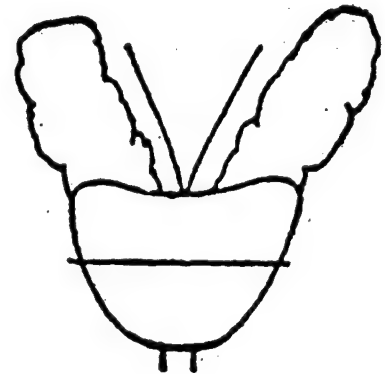
HORMONAL THERAPY

ORCHIECTOMY:	No	Yes	Date: D____M____Y____.
Total:	No	Yes	Unk
Subcapsular:	No	Yes	Unk
Testicular Prostheses:	No	Yes	Unk

LH-RH:	No	Yes	Date Started: D____M____Y____.	Date Terminated: D____M____Y____.
Type (Circle):	Lupron	Zoladex	Other:_____.	
ANTIANDROGEN:	No	Yes	Date Started: D____M____Y____.	Date Terminated: D____M____Y____.
Type (Circle):	Flutamide	Other:_____.		

Clinical Trial Tx:	No	Yes	Date Started: D____M____Y____.	Date Terminated: D____M____Y____.
Specify: _____.				
Hormonal Failure Therapy:	No	Yes	Date Started: D____M____Y____.	
Antiandrogen Withdrawal:	No	Yes	Unk	
Suramin:	No	Yes	Unk	
Chemotherapy:	No	Yes	Unk	If Yes, Specify:_____.
Other:	No	Yes	Unk	If Yes, Specify:_____.

SOAP NOTE:



Patient's Name:_____ Last Four:_____ Physician's Signature:_____.

CPDR CYROTHERAPY TREATMENT SUMMARY

I. Primary Therapy: (If primary, complete registration and staging forms and skip section II)

Date of Procedure: M_____D_____Y_____. Pre-Cryo PSA_____ Date: M_____D_____Y_____.
Pre-Cryo Lymphadenectomy: ☐ Yes ☐ No If yes, Date: M_____D_____Y_____.
If yes: ☐ Open ☐ Laparoscopic
Pre-Cryo Hormonal Therapy: ☐ Yes ☐ No
If yes, type: ☐ Lupron ☐ Zoladex ☐ Flutamide ☐ Casodex ☐ Other:
If yes, duration: _____mos.

II. Failure Therapy: Yes No

Specify FAILED XRT: ☐ Yes ☐ No (If failed XRT, complete XRT forms for 1° XRT)
FAILED Other: ☐ Yes ☐ No Specify: _____
Recurrence Biopsy: ☐ Yes ☐ No Date: M_____D_____Y_____.
Number of Cores:_____ Number of Pos Cores:_____
Biopsy Performed at: WRAMC Other:_____
Location of Pos Biopsy (Worst Grade, Worst Gleason Sum): Specific Location (if known):
LEFT SIDE: Neg Pos Not Done L.Apex L.Mid L.Base L.SV
Grade: W M P Gleason Sum:_____ R.Apex R.Mid R.Base R.SV
RIGHT SIDE: Neg Pos Not Done
Grade: W M P Gleason Sum:_____
UNKNOWN SIDE: Neg Pos Not Appl.
Grade: W M P Gleason Sum:_____

BIOPSY TYPE (Circle):

- 1 TRUS-Findings: Neg Pos Unk
2 Digitally-Directed Transrectal
3 TURP
4 Other/Specify:_____

III. Cryo Procedure

Length (induction of anesthesia to leaving OR)_____HR_____MIN
Prostate Volume:_____cc Number of Insertion Sites (Circle): 2 3 4 5 6 7
Operative Complication: ☐ Yes ☐ No If Yes, Specify:_____ Double Freeze Apex: ☐ Yes ☐ No
Double Freeze Base: ☐ Yes ☐ No
Surgical Notes: ☐ Yes ☐ No If Yes, Specify:_____ Pull Back: ☐ Yes ☐ No

Patient Name:_____

Current Address:_____

Home Phone:_____ Work Phone:_____

Date of Birth: M_____D_____Y_____

Date:_____

Physician's Signature:_____

PROSTATE ULTRASOUND TRUS REPORT

Date of TRUS: D _____ M _____ Y _____

Examiner/Physician: _____

REASON FOR TRUS:

☐ No ☐ Yes Protocol: _____

☐ No ☐ Yes Elevated PSA; specify Pre-Biopsy PSA _____ D _____ M _____ Y _____

☐ No ☐ Yes PSA Velocity _____

☐ No ☐ Yes Abnormal DRE (check all that apply): Location: ☐ L. Apex ☐ L. Mid ☐ L. Base ☐ L. SV ☐ Asymmetry

☐ R. Apex ☐ R. Mid ☐ R. Base ☐ R. SV

Presumptive DRE Stage: ☐ B0/T1c ☐ B1 ☐ B2 ☐ C

☐ No ☐ Yes Other, specify: _____

TRUS BIOPSY:

☐ No ☐ Yes Biopsy Performed: Location: ☐ L. Apex ☐ L. Mid ☐ L. Base ☐ L. SV ☐ L. TZ

☐ R. Apex ☐ R. Mid ☐ R. Base ☐ R. SV ☐ R. TZ ☐ Other

Total Number of Cores: _____

TRUS FINDINGS:

☐ No ☐ Yes Abnormal Lesion Location (check all that apply): ☐ L. Apex ☐ L. Mid ☐ L. Base ☐ L. SV

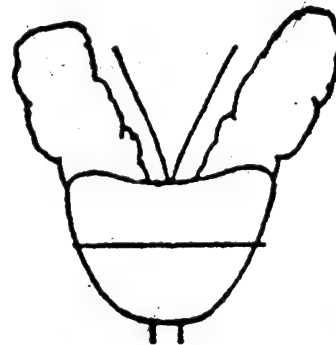
☐ R. Apex ☐ R. Mid ☐ R. Base ☐ R. SV

Volume: _____ cc's PSA-D: _____ ☐ Calculi ☐ Hypoechoic Nod. ☐ Hyperechoic Nod. ☐ Isoechoic Nod.

☐ No ☐ Yes Previous Biopsy # _____ Capsule: ☐ Intact ☐ Penetrated ☐ Suspicious

☐ No ☐ Yes Previous TRUS # _____

SOAP NOTE:



☐ No ☐ Yes Antibiotic Prophylaxis, specify: _____

Patient Identification:

Follow-up (check one):

Final Path:

☐ Patient to call MD

CA: ☐ No ☐ Yes

☐ MD to call Patient

PIN: ☐ No ☐ Yes

☐ Patient to make F/U Appt.

Physician's Signature: _____

PROSTATE CANCER FOLLOW-UP

Follow-up Date: D_____M_____Y_____ Protocol: No Yes _____
New Address : N Y Specify: _____
New Phone: N Y Specify: _____

REASON FOR FOLLOW-UP (CIRCLE ALL THAT APPLY)

Rad. Pros. XRT HT CRYO Watchful Waiting Routine Problem, If so specify: _____

RECURRENCE:

First Serologic (PSA) Elevation Recurrence: ☐ No ☐ Yes

First Clinical Recurrence: ☐ No ☐ Yes

Date of Recurrence: M_____D_____Y_____

Date of Recurrence: M_____D_____Y_____

First Clinical/Serologic Recurrence RX (Circle)

Hormonal Radiation Chemo

Watchful Wait Cryo Other: _____

Type of First Clinical Recurrence:

Pos Bone Scan: ☐ No ☐ Yes

Local Recur.: ☐ No ☐ Yes

Visceral Mets: ☐ No ☐ Yes

Second Recurrence: ☐ No ☐ Yes Date: M_____D_____Y_____ Specify: _____

LABS:

PSA: _____ M_____D_____Y_____

PAP: _____ M_____D_____Y_____

HCT: _____ M_____D_____Y_____

CR: _____ M_____D_____Y_____

ALK PHOS: _____ M_____D_____Y_____

TESTOS: _____ M_____D_____Y_____

CONTINENCE/POTENCY:

Continence: ☐ No ☐ Yes

Potency: ☐ No ☐ Yes

If no, number of pads/day: _____

If no, circle Tx: VET ICI Penile Pros None Other: _____

If yes, month/year continent: M_____Y_____

COMPLICATIONS OF PRIMARY TREATMENT: ☐ No ☐ Yes

If Prostatectomy:

DVT/PE: ☐ No ☐ Yes ☐ Unk

MI/Cardiac: ☐ No ☐ Yes ☐ Unk

Rectal Injury: ☐ No ☐ Yes ☐ Unk

BN Contracture: ☐ No ☐ Yes ☐ Unk

Reoperation: ☐ No ☐ Yes ☐ Unk

Specify: _____

Other: ☐ No ☐ Yes _____

If Hormonal:

Hot Flashes: ☐ No ☐ Yes ☐ Unk

Diarrhea: ☐ No ☐ Yes ☐ Unk

Surgical: ☐ No ☐ Yes ☐ Unk

Gynecomastia: ☐ No ☐ Yes ☐ Unk

Antiandrogen ☐ No ☐ Yes ☐ Unk

Stopped: _____

Other: ☐ No ☐ Yes _____

If Radiation:

GI Symptoms: ☐ No ☐ Yes ☐ Unk

Specify: _____

GU Symptoms: ☐ No ☐ Yes ☐ Unk

Specify: _____

PSA Nadir: _____

D_____M_____Y_____

If Cryotherapy: ☐ No ☐ Yes ☐ Unk If yes, specify: _____

SOAP NOTE:

Current Clinical Stage: _____ Disease Status (Circle): NED Alive w/CAP Alive/Unk

Patient's Name: _____ Last Four: _____ Physician's Signature: _____ Revised 12/95

PROSTATE RADIATION THERAPY FOLLOW-UP

Name: _____ SSN: _____

Radiation Dose: _____ cGy Completion Date: D _____ M _____ Y _____

Original Stage: T _____ N _____ M _____

PSA: Pre-treatment: _____ Current: _____

Prostatectomy: ☐ No ☐ Yes Date: D _____ M _____ Y _____

Past Hormonal Therapy: ☐ No ☐ Yes Currently: ☐ No ☐ Yes

Orchiectomy: ☐ No ☐ Yes Date: D _____ M _____ Y _____

Hormone Failure: ☐ No ☐ Yes

INTERVAL HISTORY (Constitutional Complaints):

Weight Loss: ☐ No ☐ Yes Fatigue: ☐ No ☐ Yes Night Sweats: ☐ No ☐ Yes Febrile Episodes: ☐ No ☐ Yes

Bone Pain: ☐ No ☐ Yes Site of Bone Pain: _____

GASTROINTESTINAL SYMPTOMS:

Constipation: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

BRBPR: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Stool Incontinence: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Melena: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Rectal Pain: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Diarrhea: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

stools/day _____

GENITOURINARY SYMPTOMS:

Hematuria: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Urinary Frequency: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Dysuria: ☐ No ☐ Yes ☐ Daily ☐ Weekly ☐ Monthly ☐ Less

Nocturia: ☐ No ☐ Yes Frequency (Episodes/night) _____

Decreased Erectile Function: ☐ No ☐ Yes

Erections: ☐ Normal ☐ Partial ☐ None

Incontinence: ☐ No ☐ Yes Pads/day: ☐ One ☐ > One

PHYSICAL EXAM:

Vital Signs: Temp: _____ Pulse: _____ Wt: _____

Resp: _____ B/P: _____

Lymphadenopathy: _____

Abdomen: _____

Musculo-skeletal: _____

Rectal: Tone: _____ Guaiac: _____

Prostate: _____

FOLLOW-UP & DISPOSITION:

Disease Status:

NED: ☐ No ☐ Yes

PSA: ☐ Rising ☐ Falling ☐ Stable

Clinical Response: DRE: ☐ Normal ☐ Stable ☐ Better ☐ Worse

D.M.: ☐ No ☐ Yes

Orders: _____

Physician's Signature: _____

Date: D _____ M _____ Y _____

CPDR NECROPSY FOLLOW-UP FORM

DEATH INFORMATION

DATE OF DEATH: D _____ M _____ Y _____.

PLACE OF DEATH: _____ CITY _____ STATE _____

DEATH CERTIFICATE ATTACHED: ☐ Yes ☐ No

IF NO, PLEASE PROVIDE CONTACT FOR CPDR TO WRITE FOR CERTIFICATE: _____

CAUSE OF DEATH (Please Check):

☐₁ FROM PROSTATE CANCER

☐₂ FROM OTHER CAUSE, Specify _____.

If other cause, was Prostate Cancer present at death: ☐ Yes ☐ No

If Yes, Stage of Prostate Cancer at death:

FINAL CLINICAL STAGE

A1	C1
A2	C2
B0	C3
B1	D0
B2	D1
	D2

FINAL TNM STAGE

T1a	T3a	NX	MX
T1b	T3b	N0	M0
T1c	T3c	N1	M1
T2a	T4a	N2	
T2b	T4b	N3	
T2c			

☐₃ CAUSE OF DEATH UNKNOWN

SOAP NOTE:

Patient's Name: _____ Last Four: _____ Physician's Signature: _____

RADICAL PROSTATECTOMY PATHOLOGY

Primary Hospital Path. Accession Number:_____.

AFIP Referral: Yes No AFIP Accession Number:_____.

OVERALL: (Circle Correct Answers)

Capsule	Negative	MicroInv.	Infilt.	Equivocal	Unilat	Bilat	Unk
Margins	Negative	Positive	Unilat	Bilat	Unk		
Seminal Vesicles	Negative	Positive	Unilat	Bilat	Unk		
Nodes	Negative	Positive	Unilat	Bilat	Unk	# of pos. nodes:_____	
Worst Grade	Well	Moderate	Poor	Unk			
Worst Gleason	2 3	4 5	6 7	8 9	10	Unk	
Worst Nuc. Grade	1 2	3 4	Unk				
Urethra	Negative	Positive	Unk				
Bladder Neck	Negative	Positive	Unk				
Multifocal	No	Yes	Unk				
Benign Tiss. in Margin	No	Yes	Unk				
# of Prostatic Tumors	1 2	3 4	5 6	7 8	9 10	>10	Unk

TUMOR SIZE(cc)			ORGAN		WORST			WORST NUC			SIDE			LOCATION		
L	W	H	CONFINED		GRADE			GRADE								
1 _____	x _____	x _____	Yes	No	W	M	P	1	2	3	L	R	B	A	M	B
2 _____	x _____	x _____	Yes	No	W	M	P	1	2	3	L	R	B	A	M	B
3 _____	x _____	x _____	Yes	No	W	M	P	1	2	3	L	R	B	A	M	B
4 _____	x _____	x _____	Yes	No	W	M	P	1	2	3	L	R	B	A	M	B
5 _____	x _____	x _____	Yes	No	W	M	P	1	2	3	L	R	B	A	M	B

Total Prostate Weight _____ grams

Final Pathological Stage: (A1) (A2) B1 B2 C C1 C2 C3 D1 D2 D0

Final TNM Pathological Stage: (T1a) (T1b) (T1c) T2a T2b T2c T3a T3b T3c T4a T4b

NX N0 N1 N2 N3

MX M0 M1

Patient's Name:_____ SSN:_____.